Amendments to the Claims

Please cancel claims 3, 7, 11, 15, 19, 23, 27 and 31.

Please amend claims 1, 4, 5, 8, 9, 12, 13, 16, 17, 20, 21, 24, 25, 28, 29, and 32 as follows:

1. (Currently Amended) A control device that translates a user's non-tactile movement into a control action comprising:

one conductor arrays connected to two or more surfaces, wherein said conductor array comprises three or more conductors;

wherein said conductor arrays comprises a first conductor on a first axis of said first surface;

wherein said conductor arrays comprises a second conductor on a second axis, perpendicular to said first axis;

wherein said conductor arrays comprises a third conductor on a third axis, perpendicular to said first and second axis;

wherein the first, second and third conductors sense the user's non-tactile movement;

a converter that translates the sensed movement into three-dimensional vector data; and

a controller that correlates said three-dimensional vector data into control movement;

wherein said converter comprises circuitry to measure the change in the frequency of a first oscillator electrically coupled to said first conductor and a second oscillator electrically coupled to a second conductor.

2. (Previously Amended) The apparatus of Claim 1 wherein said converter comprises circuitry to determine the change in capacitance in the dielectric area found between at least two conductors.

3. (Cancelled)

34. (Currently Amended) The apparatus of Claim 31 wherein said converter further comprises circuitry to heterodyne said frequency with a fixed oscillator.

45. (Currently Amended) A method of making an apparatus that translates a user's non-tactile movement into a control action comprising:

providing two or more surfaces;

providing one conductor arrays, wherein said conductor array comprises three or more conductors;

connecting one said conductor arrays to two or more said surfaces;

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wherein said conductor arrays comprises a first conductor on a first axis of said first surface;

wherein said conductor arrays comprises a second conductor on a second axis, perpendicular to said first axis;

wherein said conductor arrays comprises a third conductor on a third axis, perpendicular to said first and second axis;

wherein the first, second and third conductors sense the user's non-tactile movement;

providing a converter that translates said sensed movement into three-dimensional vector data, wherein providing a converter further comprises providing circuitry to measure the change in the frequency of a first oscillator which is electrically coupled to said first conductor and a second oscillator which is electrically coupled to said second conductor;

coupling said converter to said conductors;

providing a controller that correlates said three-dimensional vector data into control movement; and

coupling said controller to said converter.



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~~5~~ 6. (Previously Amended) The method of Claim ~~3~~ 4 wherein said step of providing a converter further comprises providing circuitry to determine the change in capacitance in the dielectric area found between at least two conductors.

7. (Cancelled)

~~6~~ 8. (Currently Amended) The method of Claim ~~37~~ 4 wherein said step of providing a converter further comprises providing circuitry that heterodynes said frequency with a fixed oscillator.

~~7~~ 9. (Currently Amended) A method that translates a user's non-tactile movement into a control action comprising:

sensing the user's non-tactile movement with a first conductor on a first axis of a surface, with a second conductor on a second axis perpendicular to said first axis, and with a third conductor on a third axis perpendicular to said first and second axis;

translating said sensed movement into three-dimensional vector data, wherein translating further comprises measuring the change in the frequency of a first oscillator which is electrically coupled to said first conductor and a second oscillator which is electrically coupled to said second conductor; and

correlating said three-dimensional vector data into control movement.

~~8~~ 10. (Previously Amended) The method of Claim ~~9~~ 7 wherein said step of translating further comprises determining the change in capacitance in the dielectric area found between at least two conductors.

11. (Cancelled)

~~9~~ 12. (Currently Amended) The method of Claim ~~911~~ 7 wherein said step of translating further comprises heterodyning said frequency with a fixed oscillator.

10/13. (Currently Amended) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps that translate a user's non-tactile movement into a control action, said method steps comprising the following steps:

sensing the user's non-tactile movement with a first conductor on a first axis of a surface, with a second conductor on a second axis perpendicular to said first axis, and with a third conductor on a third axis perpendicular to said first and second axis;

translating said sensed movement into three-dimensional vector data, wherein translating further comprises measuring the change in the frequency of a first oscillator electrically coupled to said first conductor and a second oscillator electrically coupled to said second conductor; and

correlating said three-dimensional vector data into control movement.

11/14. (Previously Amended) The program storage device of Claim 10/13 wherein said step of translating further comprises determining the change in capacitance in the dielectric area found between at least two conductors.

15. (Cancelled)

12/16. (Currently Amended) The program storage device of Claim 10/~~13~~ wherein said step of translating further comprises heterodyning said frequency with a fixed oscillator.

13/17. (Currently Amended) A control device that translates a user's non-tactile movement into a control action comprising:

two conductor arrays connected to one or more surfaces, wherein each of said conductor arrays comprises two or more conductors;

wherein a first conductor array comprises a first and second conductor that senses the user's non-tactile movement along a first axis of said surface;

wherein a second conductor array comprises a third and fourth conductor that senses the user's non-tactile movement along a second axis, perpendicular to said first axis;

a converter that translates the sensed movement into three-dimensional vector data, wherein said converter comprises circuitry to measure the change in the frequency of a first oscillator electrically coupled to a first conductor and a second oscillator electrically coupled to a second conductor; and

a controller that correlates said three-dimensional vector data into control movement.

14 ~~18~~. (Original) The apparatus of Claim 13 ~~17~~ wherein said converter comprises circuitry to determine the change in capacitance in the dielectric area found between at least two conductors of one of the conductor arrays.

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19. (Cancelled).

15 ~~20~~. (Currently Amended) The apparatus of Claim 13 ~~19~~ wherein said converter further comprises circuitry to heterodyne said frequency with a fixed oscillator.

16 ~~21~~. (Currently Amended) A method of making an apparatus that translates a user's non-tactile movement into a control action comprising:

providing one or more surfaces;

providing two conductor arrays, wherein each of said conductor arrays comprises two or more conductors;

connecting two or more said conductor arrays to one or more said surfaces;

wherein a first conductor array comprises a first and second conductor that senses the user's non-tactile movement along a first axis of said surface;

wherein a second conductor array comprises a third and fourth conductor that senses the user's non-tactile movement along a second axis, perpendicular to said first axis;

providing a converter that translates said sensed movement into three-dimensional vector data, wherein providing a converter further comprises providing circuitry to measure the change in the frequency of a first oscillator electrically coupled to a first conductor and a second oscillator electrically coupled to a second conductor;

coupling said converter to said conductors;

providing a controller that correlates said three-dimensional vector data into control movement; and

coupling said controller to said converter.

17 22. (Original) The method of Claim 16 wherein said step of providing a converter further comprises providing circuitry to determine the change in capacitance in the dielectric area found between at least two conductors of one of the conductor arrays.

23. (Cancelled)

18 24. (Currently Amended) The method of Claim 16 ~~13~~ wherein said step of providing a converter further comprises providing circuitry that heterodynes said frequency with a fixed oscillator.

19 25. (Currently Amended) A method that translates a user's non-tactile movement into a control action comprising:

sensing with a first and second conductor the user's non-tactile movement along a first axis of a surface;

sensing with a third and fourth conductor the user's non-tactile movement along a second axis, perpendicular to said first axis;

translating said sensed movement into three-dimensional vector data, wherein translating further comprises measuring the change in the frequency of a first oscillator electrically coupled to a first conductor and a second oscillator electrically coupled to a second conductor; and

correlating said three-dimensional vector data into control movement.

26. (Previously Amended) The method of Claim 19 wherein said step of translating further comprises determining the change in capacitance in the dielectric area found between at least two conductors of one of the axis.

27. (Cancelled)

28. (Currently Amended) The method of Claim 19 wherein said step of translating further comprises heterodyning said frequency with a fixed oscillator.

29. (Currently Amended) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps that translate a user's non-tactile movement into a control action, said method steps comprising the following steps:

sensing with a first and second conductor the user's non-tactile movement along a first axis of a surface;

sensing with a third and fourth conductor the user's non-tactile movement along a second axis, perpendicular to said first axis;

translating said sensed movement into three-dimensional vector data, wherein translating further comprises measuring the change in the frequency of a first oscillator electrically coupled to a first conductor and a second oscillator electrically coupled to a second conductor; and

correlating said three-dimensional vector data into control movement.

23 30. (Previously Amended) The program storage device of Claim 29 wherein said step of translating further comprises determining the change in capacitance in the dielectric area found between at least two conductors of one of the axis.

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24 32. (Currently Amended) The program storage device of Claim 2931 wherein said step of translating further comprises heterodyning said frequency with a fixed oscillator.





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